SUBSECTION 8.3

Cultural Resources

8.3 Cultural Resources

8.3.1 Introduction

This subsection discusses the environmental setting, consequences, regional and local impacts, and mitigation measures associated with the cultural resource aspects of the San Francisco Electric Reliability Project (SFERP). Subsection 8.3.2 presents the laws, ordinances, regulations, and standards (LORS) applicable to cultural resources. Subsection 8.8.3 describes the environment that may be affected by SFERP construction and operation. Subsection 8.3.4 identifies environmental consequences from development of the power plant and its associated laydown site and water supply pipeline, and Subsection 8.3.5 discusses cumulative impacts. Mitigation measures are discussed in Subsection 8.3.6. Subsection 8.3.7 presents the agencies involved and provides agency contacts. Subsection 8.3.8 presents the required permits and permitting schedule. Subsection 8.3.9 provides references used to prepare this subsection. Resumes of the preparers are provided in Appendix 8.3A.

The SFERP project is located at the corner of Illinois and 23rd streets in the Potrero District of the San Francisco (City). Land use in the vicinity of the proposed SFERP project site is predominantly industrial to the north, south, and west. The San Francisco Bay is located east of the proposed site. The laydown site is located on a vacant parcel flanked by Maryland and 26th streets, and the water supply pipeline is located on 23rd, Tennessee, Cesar Chavez, Mississippi, and Marin streets (see Figure 8.3-1 at the end of this subsection).

Cultural resources include prehistoric and historic archaeological sites[1]; districts and objects; standing historic structures, buildings, districts and objects; and, locations of important historic events, or sites of traditional/cultural importance to various groups.[2] Primary data sources used to prepare this section include the CEC testimony by Reinoehl and Mason (2002) who incorporated the results of several documents, including: Mirant (2001a, b), SECAL (2000a-c, 2001a-d), URS/Dames & Moore (2000), and Wirth Associates (1979).

1 "Site" – "the location of a significant event, a prehistoric or historic occupation or activity, or a building or structure…where the location itself possesses historic, cultural, or archeological value" (USNPS-IRD, 1991:15).

2 The "federal" definitions of cultural resource, historic property or historic resource, traditional use area, sacred resources are reviewed below and are typically applied to non-federal projects.

A cultural resource may be defined as a phenomenon associated with prehistory, historical events or individuals or extant cultural systems. These include archaeological sites, districts and objects; standing historic structures, districts and objects; locations of important historic events; and, places, objects and living or non-living things that are important to the practice and continuity of traditional cultures. Cultural resources may involve historic properties, traditional use areas and sacred resource areas.

Historic property or historic resource means any prehistoric district, site building, structure or object included in, or eligible for, inclusion in the National Register of Historic Places. The definition also includes artifacts, records and remains that are related to such a district, site, building, structure or object.

Traditional use area refers to an area or landscape identified by a cultural group to be necessary for the perpetuation of the traditional culture. The concept can include areas for the collection of food and non-food resources, occupation sites and ceremonial and/or sacred areas.

Sacred resources applies to traditional sites, places or objects that Native American tribes or groups, or their members, perceive as having religious significance.

8.3.2 Laws, Ordinances, Regulations, and Standards

Cultural resources are indirectly protected under provisions of the federal Antiquities Act of 1906 (Title 16, United States Code, Section 431 et seq.) and subsequent related legislation, policies, and federal agency regulations and guidelines for implementation of the Antiquities Act.

The following laws, ordinances, regulations, standards, and policies apply to the protection of cultural resources in California. Projects licensed by the Energy Commission are reviewed to ensure compliance with these laws. Table 8.3-1 summarizes applicable LORS.

8.3.2.1 Federal

- National Historic Preservation Act, 16 USC 470, commonly referred to as Section 106, requires federal agencies to take into account the effects of their undertakings on historic properties through consultations beginning at the early stages of project planning. Regulations revised in 1997 (36 CFR Part 800 et seq.) set forth procedures to be followed for determining eligibility for nomination, the nomination, and the listing of cultural resources in the National Register of Historic Places (NRHP). The eligibility criteria and the process are used by federal, state, and local agencies in the evaluation of the significance of cultural resources. Very similar criteria and procedures are used by the state in identifying cultural resources eligible for listing in the State Register of Historic Resources. Recent revisions to Section 106 in 1999 emphasized the importance of Native American consultation.
- Executive Order 11593, "Protection of the Cultural Environment," May 13, 1971 (36 Federal Register 8921), orders the protection and enhancement of the cultural environment by providing leadership, establishing state offices of historic preservation, and developing criteria for assessing resource values.
- American Indian Religious Freedom Act; 42 USC 1996 protects Native American religious practices, ethnic heritage sites, and land uses.

8.3.2.2 State

- Public Resources Code, Section 5024.1 establishes a California Register of Historical Resources [CRHR]; sets forth criteria to determine significance; defines eligible properties; and lists nomination procedures.
- Public Resources Code, Section 5097.5 states that any unauthorized removal or destruction of archaeologic or paleontologic resources on sites located on public land is a misdemeanor. As used in this section, "public lands" means lands owned by, or under the jurisdiction of, the state, or any city, county, district, authority, or public corporation, or any agency thereof.
- Public Resources Code, Section 5097.9 prohibits the interference with the free expression of Native American religion as provided in the United States Constitution and the California Constitution; and causing severe or irreparable damage to any Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine on public property, except on a clear and convincing showing that the public interest and necessity so require.

TABLE 8.3-1
Applicable Cultural Resource Laws, Ordinances, Regulations, and Standards

LORS	Requirements	Applicability
National Historic Preservation Act, Section 106	Requires federal agencies to take into account the effects of their undertakings on cultural resources	No
Executive Order 11593	Orders protection and enhancement of the cultural environment	No
American Indian Religious Freedom Act	Protects Native American religious practices, ethnic heritage sites and land uses	No
California Public Resources Code Section 5024.1	Establishes California Register of Historical Resources	Yes
California Public Resources Code Section 5097.5/5097.9	Prohibits causing severe or irreparable damage to any Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine located on public property, except on a clear and convincing showing that the public interest and necessity so require.	Yes
California Public Resources Code Section 5097.98/5097.99	Requires notification to most likely descendants in the event a Native American grave is encountered. Imposes penalties for obtaining or possessing Native American human remains or artifacts.	Yes, if burials are discovered
California Public Resources Code Section 21083.2	Provides that if a lead agency determines that project has significant effect on “unique” archaeological resources the environmental impact report must address those issues.	Yes
California Public Resources Code Section 21084.1	Equates a significant effect on the environment with a substantial adverse change in significance of a historic resource	Yes
California Administrative Code, Title 14 Section 4307	Prohibits destruction of paleontological, archaeological and historical objects	Yes
CEQA Guidelines, Title 14 Code of Regulations Section 15126.4(b)	Discusses mitigation measures related to historical resources	Yes
CEQA Guidelines, Title 14 Code of Regulations Section 15064.5	Defines “historical resources”, determines significance of impacts to archaeological and historical resources	Yes
CEQA Guidelines, Title 14 Code of Regulations Section 15064.7	Defines “cumulatively significant”, describes “thresholds of significance”	Yes
California Penal Code, Section 622.5	Makes it a misdemeanor to willfully damage objects or things of archaeological or historical interest	Yes
California Health and Safety Code, Section 7050.5	Requires that in the event of discovery of human remains, all excavation must cease until the coroner of the relevant county makes certain findings	Yes, if burials are discovered

TABLE 8.3-1
Applicable Cultural Resource Laws, Ordinances, Regulations, and Standards

LORS	Requirements	Applicability
San Francisco Building Code, Chapters 16B and 16C	Requires owners to undertake structural analysis of each unreinforced masonry wall; and to undertake alterations to conform to code or to demolish the structure	Yes
San Francisco Planning Code, Article 10	Provides for the designation of landmarks and historic districts, and recognition of structures of historic, architectural and aesthetic merit	Yes, if properties are initiated for land mark designation

- Pubic Resources Code, Section 5097.99 prohibits obtaining or possessing Native American artifacts or human remains taken from a grave or cairn and sets penalties for these actions.
- Public Resources Code, Section 21083.2 states that if a project may affect a resource that has not met the definition of an historical resource set forth in Section 21084, then the lead agency may determine whether a project may have a significant effect on "unique" archaeological resources; if so, an EIR shall address these resources. If a potential for damage to unique archaeological resources can be demonstrated, such damage must be avoided. If they cannot be avoided, mitigation measures shall be required. The law also discusses excavation as mitigation; discusses the costs of mitigation for several types of projects; sets time frames for excavation; defines "unique and non-unique archaeological resources;" provides for mitigation of unexpected resources; and sets financial limitations for mitigation under the section.
- Public Resources Code, Section 21084.1 indicates that a project may have a significant effect on the environment if it causes a substantial adverse change in the significance of a historic resource; the section further defines a "historical resource" and describes what constitutes a "significant" historical resource.
- Title 14, California Code of Regulation (CCR) Section 4307 (14 CCR 4307), states that no person shall remove, injure, deface or destroy any object of paleontological, archaeological, or historical interest or value.
- CEQA Guidelines, 14 CCR 15126.4, *Consideration and Discussion of Mitigation Measures Proposed to Minimize Significant Effects,* subsection (b) discusses impacts of maintenance, repair, stabilization, restoration, conservation, or reconstruction of a historical resource. Subsection (b) also discusses mitigation through avoidance of damaging effects on any historical resource of an archaeological nature, preferably by preservation in place, or by data recovery through excavation if avoidance or preservation in place is not feasible. Data recovery must be conducted in accordance with an adopted data recovery plan.
- CEQA Guidelines, Title 14 CCR 15064.5, *Determining the Significance of Impacts to Archaeological and Historical Resources*. Subsection (a) defines the term "historical resources." Subsection (b) explains when a project may be deemed to have a significant effect on historical resources and defines terms used in describing those situations.

Subsection (c) describes CEQA's applicability to archaeological sites and provides a bridge between the application of the terms "historical" resources and a "unique" archaeological resource.

- CEQA Guidelines, 14 CCR 15064.7, *Thresholds of Significance*. This section encourages agencies to develop thresholds of significance to be used in determining potential impacts and defines the term "cumulatively significant."
- California Penal Code, Section 622.5. This section provides that anyone who willfully damages an object or thing of archaeological or historic interest can be found guilty of a misdemeanor.
- California Health and Safety Code, Section 7050.5. If human remains are discovered during construction, the project owner is required to contact the county coroner.
- California Public Resources Code, Section 5097.98. If the county coroner determines that the remains are Native American, the coroner is required to contact the Native American Heritage Commission, which is then required to determine the "Most Likely Descendant" to inspect the burial and to make recommendations for treatment or disposition of the remains and any associated burial items.

8.3.2.2.1 State CEQA Process. CEQA requires a review to determine if a project will have a significant effect on archaeological sites or a property of historic or cultural significance to a community or ethnic group eligible for inclusion in the CRHR (CEQA Guidelines).

CEQA provides that a project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment (Section 21084.1 of the Public Resources Code). CEQA defines substantial adverse change as demolition, destruction, relocation, or alteration that the significance of a historical resource would be impaired (Section 5020.1). Section 21084.1 stipulates that any resource listed in, or eligible for listing in, the CRHR[3] is presumed to be historically or culturally significant unless the preponderance of evidence demonstrates the contrary.[4]

Resources listed in a local historic register or deemed significant in a historical resource survey (as provided under Section 5024.1g) are presumed to be historically or culturally significant unless the preponderance of evidence demonstrates they are not.

A resource may be historically significant even if it is: 1) not listed in, or determined to be eligible for listing in, the CRHR, 2) not included in a local register of historic resources, and

3 The California Register of Historical Resources is a listing of "…those properties which are to be protected from substantial adverse change." Any resource eligible for listing in the California Register is also to be considered under CEQA.

4 A historical resource may be listed in the California Register of Historical Resources if it meets one or more of the following criteria: "(1) is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States; (2) is associated with the lives of persons important to local, California or national history; (3) embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values; or, (4) has yielded or has the potential to yield information important in prehistory or history (…of the local area, California or the nation)" (Public Resources Code §§5024.1, Title 14 CCR, Section 4852). Automatic CRHR listings include National Register of Historic Places (NRHP) listed and determined eligible historic properties (either by the Keeper of the NRHP or through a consensus determination on a project review); State Historical Landmarks from number 770 onward; Points of Interest nominated from January 1998 onward. Landmarks prior to 770 and Points of Historical Interest may be listed through an action of the State Historical Resources Commission.

3) not deemed significant in a historical resource survey (Section 21084.1; see Section 21098.1).

CEQA requires a Lead Agency to identify and examine environmental effects that may result in significant adverse effects. Where a project may adversely affect a unique archaeological resource,[5] Section 21083.2 requires the Lead Agency to treat that effect as a significant environmental effect and prepare an Environmental Impact Report (EIR). When an archaeological resource is listed in, or is eligible to be listed in, the CRHR, Section 21084.1 requires that any substantial adverse effect to that resource be considered a significant environmental effect. Sections 21083.2 and 21084.1 operate independently to ensure that potential effects on archaeological resources are considered as part of a project's environmental analysis. Either of these benchmarks may indicate that a project may potentially have an adverse effect on archaeological resources.

Other state-level requirements for cultural resources management appear in the California Public Resources Code Chapter 1.7, Section 5097.5 (Archaeological, Paleontological, and Historical Sites), and Chapter 1.75, beginning at Section 5097.9 (Native American Historical, Cultural, and Sacred Sites) for lands owned by the state or a state agency.

The disposition of Native American burials is governed by Section 7050.5 of the California Health and Safety Code and Sections 5097.94 and 5097.98 of the Public Resources Code, and falls within the jurisdiction of the Native American Heritage Commission (NAHC).

If human remains are discovered, the San Francisco Medical Examiner (Coroner) must be notified within 48 hours and, until his arrival, there should be no further disturbance to the site where the remains were found. If the remains are determined by the coroner to be Native American, the Coroner is responsible for contacting the NAHC within 24 hours. The NAHC, pursuant to Section 5097.98, will immediately notify those persons it believes to be most likely descended from the deceased Native American so they can inspect the burial site and make recommendations for treatment or disposal.

8.3.2.3 Local

8.3.2.3.1 San Francisco City and County. The San Francisco Building Code, Chapters 16B and 16C, requires owners of unreinforced masonry walls to undertake a structural analysis. If the building does not meet the minimum standards of the code and any exceptions, the owner must structurally alter the building to conform to the code or have the building demolished. San Francisco Planning Code Article 10 provides a mechanism to encourage historic preservation in the case of permits for the alteration or demolition of buildings that are: 1) initiated as land marks, 2) designated as land marks, or 3) located within a district that has been designated as a historic district under Article 10. This article allows the City to maintain a list of buildings and structures which have been "officially designated by agencies of the State or federal government."

5 Public Resources Code 21083.2 (g) defines a unique archaeological resource to be: An archaeological artifact, object, or site, about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria: (1) contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information; (2) has a special and particular quality such as being the oldest of its type or the best available example of its type; or, (3) is directly associated with a scientifically recognized important prehistoric or historic event or person.

8.3.3 Affected Environment

The project area is located on the San Francisco Peninsula, a northward extension of the Santa Cruz Mountains that separates San Francisco Bay from the Pacific Ocean. The project area is an industrial area within the City of San Francisco. The project is located on Potrero Point on the western shoreline of San Francisco Bay about 1.5 miles south of the Bay Bridge. Potrero Hill rises to an elevation of approximately 300 feet above sea level, one-half mile west of the project. The project area is industrial with the former Pier 70 shipyard complex to the north and warehouses to the south. Immediately west is the PG&E Potrero Substation and immediately east is Mirant's Potrero Power Plant. Another warehouse to the west of the substation separates the project from a residential area at the base of Potrero Hill, known as the Dogpatch Neighborhood. The project area is developed and covered by buildings and pavement.

There are two officially-recognized historic districts, Dogpatch and Pier 70, both of which are completely within the boundaries of, and are part of, a third, larger historic district called the Central Waterfront District (CWD).[6] These districts share common themes, focusing on the industrial nature of the area, along with the theme of residential and commercial development for local industrial workers and of the City of San Francisco.

The Central Waterfront District, with its embedded Dogpatch and Pier 70 districts, contains 243 buildings of CRHR status levels (status codes of 1, 2, 3, 4, 5, 7) in the state historic property file (or CHRIS List) that are individually listed on the NRHP (code 1), determined eligible (code 2), appear to be eligible (code 3), may become eligible (code 4), are eligible for local list only (code 5), or have not been evaluated or whose status is underdetermined (code 7). These include resources that might be contributors either to the larger district or the individual districts. Another 32 buildings have been evaluated as code 6 (determined ineligible or delisted); 29 are 6Z1 (found ineligible with no potential for listing); two are 6Z (found ineligible); and one is 6Y2 (found ineligible by consensus determination but not evaluated for local listing).

8.3.3.1 The San Francisco Electric Reliability Project (SFERP)

The area around the proposed SFERP 145 MW power plant and switchyard—an area about one mile in diameter and roughly bounded by Potrero Hill/I-280 on the west, San Francisco Bay on the east, Islais Creek on the south, and Mariposa Avenue on the north—has been the subject of a number of historic property inventory and evaluation efforts over the past two decades, often focused on areas immediately adjacent to the project site. During the course of these efforts almost every building over 50 years old has been evaluated for its eligibility under criteria of significance and integrity established by the NRHP, CRHR, or local San Francisco historic landmark ordinance. The result of these surveys is that the known universe of historic architectural resources in the area of the project site is well understood.

All buildings within the project site have been recently inventoried and evaluated. Moreover, the project site was subject to a recent (2002-2003) CEC proceeding as a part of Mirant's Potrero Unit #7 AFC (see documents filed with Application for Certification,

6 The inventory of the Central Waterfront District was completed in October of 2001 under a grant from the SHPO to the San Francisco Planning Department. It was approved by the San Francisco Planning Commission and is currently under review at the SHPO for its potential to be included in the CRHR. See: San Francisco Planning Department, "Central Waterfront Cultural Resources Survey Summary Report and Draft Context Statement, October 2000 – October 2001." CEC Dockets, 00-AFC-4.

Mirant Corporation's Potrero Power Plant Unit 7 Project, Docket No. 00-AFC-4.). During these proceedings two buildings—the Meter House and the Compressor House, both part of the old San Francisco Gas and Electric Company gas works complex—were determined by CEC staff to meet the criteria for listing in the CRHR (CEC 2002:5.4-14-15). One of the other historic-era buildings within the project site, known as Station A, was the subject of conflicting testimony. Witnesses sponsored by the City testified that Station A should be considered a historical resource under CEQA, notwithstanding the condition of the building, because of its historic context and unique historic attributes. Witnesses sponsored by Mirant and staff testified that Station A should not be considered a historical resource under CEQA because it lacks integrity pursuant to the criteria of the National Register. Across 23rd Street to the south are two historic sugar industry warehouses.

In addition, the proposed laydown area (bounded roughly 25th Street on the north, 26th Street on the south, the bay on the east, and Michigan Street on the west) was examined as a part of the Central Waterfront District survey and the present project. Since the area is fenced, there was limited access to the site; however, it appears (from the public right-of-way) to have no historic period structures (at least 45 years old). A concrete mixing plant, temporary offices and containers are currently located on the site. An aerial photograph dated July 1993 shows the area as completely vacant.[7]

Given the existence of various inventory projects, no additional inventory or evaluation was undertaken. Rather, this section addresses the impacts the project may have on the known and existing historical resources on or around the project site as defined under state law and local ordinances. The following text briefly summarizes the history of the project area, discusses the main themes and contexts, describes the resources on the project site and in the project area, and summarizes project impacts.

8.3.3.2 Prehistoric Setting

The earliest documented occupation of the area between San Francisco and Monterey bays dates to about 8,000 years before present (BP). Prior to about 2,000 BP, archaeological evidence suggests that this area was occupied by small groups of hunter-gatherers that exploited both terrestrial and marine resources (mostly shellfish). Approximately 2,500 BP, large shellmound sites began to be occupied around San Francisco Bay. These sites were likely habitation sites with dense shell midden, flaked and ground stone tools, bone tools, beads, ornaments, charmstones, and burials. The shellmounds were occupied until the arrival of the Spanish.

The main marine resource used was shellfish, mostly oysters and bentnose clams. The most important upland resource was acorns gathered from oak trees in the fall. Acorn processing (leaching out the tannic acid and grinding into acorn meal) required a significant amount of labor. Use of acorns as early as 2,500 BP indicates intensification of resource procurement at a relatively early period in prehistory in this area. The beginning of the use of the shellmound sites around San Francisco Bay may correspond with the arrival of Utian language speakers from the Delta area. These Utian speakers were the ancestors of the Costanoans who occupied the Bay Area when the Spanish arrived.

7 TerraServer, http://terraserver-usa.com/printimage.aspx?T=1&S=10&X=2771&Y=20892&Z=10&P=San+Francisco%2c+California%2c+United+States&D=10+Jul+1993, accessed December 20, 2003

8.3.3.3 Ethnographic Background

The project area lies within the territory occupied by the Native American group (known to the Spanish and 20th century ethnographers) as the Costanoan. The contemporary descendants of this group are members of the Ohlone Indian Tribe. The Costanoan group occupied the coast of California from San Francisco to Monterey and inland to include the coastal mountains from the southern side of the Carquinez Straits to the eastern side of the Salinas River south of Chalone Creek. Costanoan refers to a language family consisting of eight related languages. Each language was spoken by different ethnic groups within their established geographical area. The political units within each ethnic group were tribelets; each tribelet varied from 50 to 500 people with the average being about 200. Each tribelet had one or more permanent villages and several temporary camps within its territory. Hunting and gathering groups lived in temporary camps when securing resources within the tribelet territory away from the village.

The Ramaytush language speakers occupied the project area. It is estimated that some 1,400 speakers were present in 1770. The Ramaytush speakers were divided into at least 10 tribelets. Each tribelet had a chief, a position inherited patrilineally (through the father's side). The chief fed visitors, directed ceremonial activities, organized hunting, fishing, and gathering activities and directed warfare expeditions. The coastal Costanoan traded with the inland Yokuts (mussels, abalone shells, dried abalone meat, and salt for piñon nuts and other inland products). Acorns from four species of oak were the most important plant food. Nuts, berries, seeds, and roots were also important. Costanoan groups practiced controlled burning of the chaparral to encourage sprouting of seed plants and improve deer and elk browse. The most important foods were deer, rabbit, steelhead, salmon, sturgeon, lampreys, oysters and clams.

The Costanoan lived in thatched dome houses with rectangular doorways and a central hearth. Other structures in the villages included sweathouses, dance enclosures, and an assembly house. Technology included tule balsa canoes, bows and arrows, and baskets. Chipped stone tools were made from chert obtained locally and obsidian obtained in trade with others. Between 1770 and 1797,the Spanish established 7 missions in Costanoan territory. Due to introduced European diseases and a declining birth rate, their population decreased from about 10,000 to 2,000 by 1832.

8.3.3.4 Historic Setting

Spanish explorers intent on settling the Pacific Coast first reached the San Francisco Bay in 1769, and by 1776, Juan Bautista de Anza, Jose Joaquin Moraga and Fathers Francisco Palou and Pedro Cambon established the Mission Dolores (San Francisco) and the San Francisco Presidio. Mission Dolores was one of 21 Spanish missions extending from San Diego in the south to the mission San Francisco Solano in Sonoma in the north, all established between 1769 and 1823. The presidio was one of four established by the Spanish prior to 1800. In 1774, a fort was also established at Castillo de San Joaquin, later Fort Point. The early history of California is well documented in many sources, including Rice, et al. (1996) and Hoover, et al. (1990).

The Spanish era ended when Mexico won its independence from Spain in 1821. The missions were secularized by the mid-1830s, and former mission lands were granted to soldiers and other Mexican citizens for use as cattle ranches. Mexicans, Europeans, and

Americans came to California to take advantage of the generous land grants of the Mexican government. The end of Spain's imperialist policies led, by the 1830s, to a lively hide and tallow trade between the inland ranches and the settlements in the San Francisco Bay Area. The little cove settlement of Yerba Buena, the forerunner of the City of San Francisco, was founded by Captain William A. Richardson in 1835. As Pacific Coast trade increased through the 1830s and 1840s, the center of activity in the Bay Area was the natural anchorage for trading ships at Yerba Buena. In the summer of 1846, war between Mexico and the US led to the American occupation of San Francisco (see Cole 1981:13-19 and Hoover, et al. 1990:331-334).

American success in the Mexican-American War in 1848, followed by the Gold Rush of 1849, brought large numbers of Anglo-Americans to San Francisco. As a result, the city experienced many significant changes because it was the port closest to the gold fields. It quickly developed into a shipping and transportation center for a state that was remote and isolated from the rest of the country. Other towns grew around the Bay Area, such as Oakland (incorporated in 1852), and San Jose, which served as the State's first capital in 1849. However, San Francisco far outpaced these areas, which developed more fully after the transcontinental railroad was completed in the Bay Area in 1869. Bay Area towns provided commercial, warehousing, financial, and manufacturing services for the inland mining and agricultural areas of the state (Hoover, et al. 1990:335; Beck and Haase 1974:30).

In 1847, the local government changed the name of Yerba Buena to San Francisco. As noted, at that time it was a small village fronting a large mud flat and cove that became an instant city in a few short years. Speculators and promoters surveyed a town site in 1847 and began selling lots, some of which were under water. Portions of the bay and Yerba Buena Cove were filled with the hulks of abandoned ships and other material to create more land for development. By late 1849 development of the City had spread well beyond the bounds of Yerba Buena Cove onto the surrounding area's flats and hills. Shipping companies built wharves hundreds of yards into the bay during the early 1850s. Wells Fargo, Adams and Company, and the Merchants Exchange established headquarters in San Francisco in 1853, as did other commercial institutions soon thereafter; making the City the center of the State's economic activity. The population of San Francisco reached 57,000 in 1860 (Rice, et al. 1996:221-226; Soule 1855:301-305, 437-441; and Cole 1981:43-44).

The City expanded along the waterfront to the south and west from Yerba Buena Cove, which was located on the northeast end of the San Francisco peninsula. The Potrero Point area, where the project area is located, is a small finger of land projecting out into the bay south of the core of San Francisco. The city's industrialists developed it as an early industrial area. This area extended from the waterfront to Potrero Hill, located approximately one mile inland. The area was well located at the southern end of the city, close enough to serve as a convenient industrial location but south of the main portion of the new city. By 1855, heavy industry began locating at Potrero Point, including a black powder plant located at the point owing to its isolated location. The explosives industry remained at the point until about 1880, when encroachment by residential areas led to its relocation to other areas (San Francisco Planning Department 2001).

By the 1880s, the Potrero Point area consisted of a grid of streets sparsely populated with warehouses, docks and industrial complexes, roughly bounded by 16th Street on the north and 26th Street on the south. There were numerous substantial industrial and commercial

establishments located at Potrero Point in the vicinity of the waterfront. These included the Pacific Rolling Mills Company, Union Iron Works, and the San Francisco Cordage Factory and Rope Works on the north side of the point, and the California Sugar Refinery and the works of the City Gas Company on the southern end. The California Sugar Refinery was established by Claus Spreckels in 1881, was renamed the Western Sugar Refinery in 1891, and eventually expanded to border Louisiana and Humboldt streets on the east and north and the waterfront on the south and west. North of the California Sugar Refinery was the gas manufacturing plant of the City Gas Company, established at Potrero Point in 1872. The plant was located on blocks bounded by Georgia, Massachusetts, and Humboldt Streets, and its facilities included two 1,038,000-cubic-foot gas storage tanks. Portions of this well-equipped complex survived, and were later incorporated into the PG&E plant built at the site. The industrial and storage works of the California Sugar Refinery, and the City Gas Company plant, were the first major developments to occur in the project location (San Francisco Planning Department 2001:8-9; Sanborn 1886-1887, 1900; USGS 1895, 1899; and Coleman 1952:28-29).

The Western Sugar Refinery complex at Potrero Point was established to refine and produce sugar made from Hawaiian sugar cane. It eventually became the largest sugar refinery in the western United States. The facility consisted of several multi-story brick buildings that functioned as a refinery, and filter house. The complex also consisted of several brick warehouses, coal bunkers, storage tanks, a sack house, stock corrals, a large storage reservoir, and wharves. A Southern Pacific Railroad spur ran down 23rd street to the wharf. The refinery operated until 1949, when it was purchased by its major competitor, the California and Hawaiian Sugar Refining Corporation (C&H) (Sanborn Fire Insurance Maps, 1900, 1915, 1950; San Francisco Planning Department 2001:10-11). C&H also had an extensive factory complex with ocean-shipping facilities in Crockett on the Carquinez Straits.

The first decades of the 20th century were a period of rapid expansion in the Bay Area. In the Potrero area, industrialists filled the shallows in the bay to the south of Potrero Point between 1899 and 1914, and constructed a wharf along the south end of Potrero Point. During the same period the San Francisco Shipyard was constructed on the north end of Potrero Point. The area underwent a period of reconstruction and further expansion after the devastating 1906 earthquake that destroyed many 19th century buildings and structures in San Francisco.(USGS 1899, 1915). Buildings in the gas works and in the sugar complex survived the disaster.

The San Francisco Gas and Electric Company (SFG&E) purchased the City Gas Works Plant at Potrero Point in 1897. Formed from a consolidation of the San Francisco Gas and Light Company and Edison Light and Power Company in 1896, SFG&E had absorbed many smaller competitors by 1901. However, at that time there were other companies competing for customers in a rapidly expanding utility industry, resulting in an intense rate war.

This rate war was illustrated by two competing utility companies with plants at Potrero Point. One of SFG&E's competitors was Claus Spreckels, who, in 1899 and 1901, incorporated the Independent Electric Light and Power Company and Independent Gas and Power Company. In 1901, Spreckels built an electric generating plant adjoining his Western Sugar Refinery at Potrero Point, located south of the SFG&E plant at Potrero. The state-of-the-art plant consisted of a large brick structure that housed a steam-powered electrical generating plant with a 5,000-kilowatt capacity, and had an adjoined gas plant.

The plant was constructed on the west side of Louisiana Street, on the site formerly owned by the California Barrel Company. The rate war ensued until 1903, when Spreckels and others sold their works to SFG&E, ending the competition. In 1906, the San Francisco Gas & Electric was renamed Pacific Gas & Electric (PG&E), and the former Spreckels facility at Potrero, which was more modern and up-to-date than the other SFG&E facility at Potrero, became known as Station A. It was one of two power plants in the area that survived the 1906 earthquake and was subsequently expanded as the city was rebuilt. By 1914, the PG&E facility was expanded to the west between Louisiana and Michigan Streets, including the construction of large 1- and 5-million-cubic-foot gas holders. During this year the Meter House was constructed. The plant was also expanded to the south of 23rd Street, with a gas pump and gas holder constructed near the south wharf at Potrero Point (Coleman 1952:82-91, 236; Sanborn Fire Insurance Maps 1900, 1914).

PG&E's Station A was the largest steam electric plant west of the Rocky Mountains from 1903 through 1913, and supplied almost all of San Francisco's electricity during this period. In 1924, the Compressor House was constructed on the site. Later, when PG&E developed cheaper hydroelectric power, Station A was used to supplement the hydroelectric power during periods of peak use. PG&E modernized the station's equipment throughout the years, and with the continuing upgrades Station A remained in operation until 1983. The company placed the Potrero gas plant on standby from 1929 to 1960, when much of it was demolished (California Energy Commission 2002:5.4.7).

Fire insurance maps prepared between 1915 and 1950 show that the south end of Potrero Point was occupied by the PG&E facility and the Western Sugar Refinery (C&H). During this period Kentucky Street was renamed Third Street. Between 1915 and the early 1940s many of the PG&E and Western Sugar Refinery structures remained at the waterfront between 22nd and 23rd street, but the structures along the south wharf were replaced. By the 1950s, much of the C&H sugary refinery had been removed, and by the mid-1960s, many of the PG&E structures north of Humboldt Street had also been removed (Sanborn Fire Insurance Maps 1914, 1950; USGS 1915, 1942, 1946, 1947a,b, 1948, 1950, 1956, and 1968; San Francisco Planning Department 2001:10-11). The dense concentration of industrial buildings on the location of the PG&E and C&H complexes can be seen in several historic photographs included in the CWD report, especially Figure 6, an aerial photograph taken between 1929 and 1934. This image shows the complex of buildings that served the sugar industry east of Station A, all of which have since been removed (San Francisco Planning Department 2001:14).

8.3.3.5 Resources Inventory

The SFERP project site (and laydown area) lie within the area researched by Southern Energy California (SECAL)/Mirant for the proposed Potrero Unit 7 Project (00-AFC-4). Records searches were conducted by previous consultants at the Northwest Information Center of the California Historic Resources Information System (CHRIS). The record searches did not identify any previously recorded prehistoric cultural resources within one-quarter mile of the SFERP project. An updated CHRIS records search (NWIC 03-548) was conducted on February 3, 2004 for this project to check for recorded resources in areas not checked for the Potrero project (e.g., the Islais Creek local and surrounding streets) because the Potrero project footprint did not include streets subject to excavation for the water supply pipeline and the laydown site.

The previous CHRIS record searches indicated that two previous cultural resources investigations covered the SECAL/Mirant Potrero project area. One of the investigations was completed by Wirth Associates (1979) for an earlier expansion of the Potrero Power Plant. Part of the brick foundation of one of the mid-19th century powder magazines discussed above was found in a trench excavated in the northeastern part of the power plant. This feature was not included in the record search results, indicating that a site record form had not been submitted to CHRIS. The other investigation was prepared for the 1998 EIR for the sale of PG&E power plants (that included the Potrero Power Plant). This investigation did not identify any archaeological resources in the SFERP project area, but concluded that there was a low to moderate potential for buried prehistoric resources and a moderate to high potential for buried historic resources. Several industrial buildings more than 50 years old were identified in the project vicinity, mostly located west of Third Street. The I.M. Scott School, built in 1895 and located at 1060 Tennessee Street, is San Francisco Historical Landmark 138 (SECAL 2000c).

Another SECAL/Mirant record search identified underwater cultural resources such as shipwrecks that could be affected by Potrero Unit 7 project discharge pipelines in the bay. No shipwrecks or other underwater cultural resources were identified (SECAL 2000c). SECAL/Mirant consulted previous evaluations of historic structures in the project area including evaluation of structures on the power plant parcel (SECAL 2001c) and evaluation of structures in the Southern Waterfront survey area that included the adjacent Union Iron Works, Pier 70 Historic District (SECAL 2001b). In 2002 the San Francisco Department of Planning conducted a cultural resources survey of the Central Waterfront (which included the power plant property) sponsored by the State Office of Historic Preservation (see San Francisco Planning Commission 2001). The survey was accepted by the San Francisco Planning Commission and forwarded to the State Office of Historic Preservation to review the eligibility of the District for listing in the CRHR. While the survey included the project site, it specifically identified that no original survey work was undertaken as to that site. Instead the survey made references to prior survey work on the site. (per Mark Paez, 3/4/04). The CWD report recommended that "extant P.G.&E. and Western Sugary [sic] Refinery resources should be examined as contributors to a potential Pier 70 historic district or as resources within a potential stand-alone historic district" and "at the very minimum, the Central Waterfront area's historic resources should be given special consideration" in local land use planning (San Francisco Planning Commission 2001:10, 27).

CHRIS records search NWIC 03-548 revealed no recorded archaeological resources in the SFERP project area. A prehistoric archaeological site, CA-SFR-15 (P-38-000015) is recorded approximately 0.5 miles south of Marin Street (which is the terminus of the proposed water supply pipeline). A historic resource (P-38-004274) is located just south of CA-SFR-15 (and is approximately 0.6 miles south of Marin Street). Resource P-38-004274 is the Islais Creek Sewage Treatment Plant, which was recommended by its recorder as NRHP Status Code 3S (eligible under Criterion C for design qualities at the local and regional levels of significance)(Kelley 2002). No resources are recorded on or adjacent to the construction laydown site.

8.3.3.5.1 Field Surveys. No new archaeological field surveys were conducted for the SFERP project because recent previous surveys have already covered the subject project site. The laydown area, which has been recently graded, and partially gravelled, contains no

permanent structures. The laydown was not inspected because underlying soils will not be disturbed by the project. The water supply pipeline will be routed through an existing concrete pipe trench and along existing paved streets; therefore, native soils underlying these streets are covered and cannot be inspected. SECAL/Mirant conducted an archaeological survey of the Potrero project property and its associated underground transmission routes. The survey of the Potrero site was conducted in 1999 and 2000 by Mark Hale (SECAL 2001a).

An historic architectural resources survey was conducted for the Potrero site and all properties directly adjacent by Michael Corbett and Denise Bradley (SECAL 2001a-d).

As reported by Reinoehl and Mason (2002:5.4-9), the Potrero property is completely developed and covered by structures and pavement. Some of the property consists of fill placed to reclaim land from San Francisco Bay. Other areas have fill placed to raise the original land surface to create a level area of building. In one such area, the remnants of a powder magazine built in the late 1850s were discovered in an exploratory trench (Wirth Associates 1979). No archaeological resources were identified as a result of the SECAL/Mirant's archaeological surface survey, a predictable result, given the inability to see the original ground surface (SECAL 2001a).

Because of the potential for encountering submerged buried cultural resources in the bay, the geotechnical boring and sediment sampling for the Potrero project was monitored. Eucalyptus fragments found in a geotechnical boring at a depth of 9 to 23 feet suggest the presence of a wood pile at the location. Small wood fragments were found in 8 of the 31 sediment samples. No other historical material was recovered. The eucalyptus wood pile and small wood fragments were interpreted as representing remnants of the East Wharf/Sugar Dock associated with the Western Sugar Refinery. The wharf was the only structure built in the water in the Potrero project area and was demolished sometime between 1950 and 1975. The eucalyptus wood pile may have supported the wharf. The small wood fragments probably represent remnants of the wharf material deposited on the bayfloor after demolition (SECAL 2000c). It is not likely that historical material dating prior to the 20th century exists on the bay floor in the project area. This area was probably dredged in order to accommodate large ships carrying sugar that moored at the East Wharf. Vessels over 400 feet in length are shown moored at the East Wharf of the Western Sugar Refinery in photos dating to the 1930s and 1940s (SECAL 2000c).

8.3.3.5.2 Resources on the Project Site. The SFERP project site contains a number of structures including three older buildings:

- The Meter House
- The Compressor House
- Station A

During hearings regarding Potrero 7, all witnesses addressing cultural resources, including CEC staff, agreed that the Meter House and the Compressor House meet the criteria for listing in the California Register of Historical Resources (CRHR) and should be considered historic resources under CEQA.

With regards to Station A, there was conflicting testimony. Witnesses sponsored by the City testified that Station A also meets the criteria for listing in the CRHR notwithstanding the

condition of the building.[8] However, witnesses sponsored by Mirant and CEC staff testified that approximately one half of Station A has been demolished, and concluded that the building no longer met the criteria for listing on the CRHR because it lacks historic integrity.[9] All three of the masonry buildings on the site are currently subject to the Unreinforced Masonry Ordinance (codified in the San Francisco Building Code, Chapters 16B and 16C) and, if they were to remain onsite will need to be rehabilitated.

8.3.3.5.3 Resources Outside the Project Site that May Be Subject to Indirect Impacts. As noted above, the area within the general boundaries of the Central Waterfront District (CWD) (which includes within its boundaries the Dogpatch and Pier 70 districts) has been thoroughly inventoried and, in most cases, its resources 50 years old or older have been evaluated. Table 8.3B-1, in Appendix 8.3B, lists the resources within the CWD, and notes if they are known to be in another established district (i.e., Dogpatch or Pier 70).

8.3.3.5.4 Resources on the Laydown Site. There are no standing buildings or structures on the laydown site. The laydown site lies on land that was reclaimed from San Francisco Bay in the early decades of the 20th century.

8.3.3.5.5 Resources Along the Water Pipeline Corridor. There are no standing buildings or structures within the proposed water pipeline corridor. A portion of the pipeline is routed within a concrete pipe collection box and along existing streets and will not encroach upon existing buildings or structures that flank the affected streets. Like the laydown site, much of the proposed pipeline route lies on land that was reclaimed from San Francisco Bay in the early decades of the 20th century. The western most portion of the proposed pipeline route (Marin and Mississippi Streets) appears to correspond to former bayshore or upland that once surrounded the saltwater wetlands associated with Islais Creek in the late 19th century (USGS 1896). The western portion of the proposed pipeline route may be an area of high probability for the presence of prehistoric archaeological resources. However, the pipeline will be contained within an existing collection box from Cesar Chavez and Indiana streets to its terminus at Marin Street (see Figure 2-1). The CHRIS records search conducted on February 3, 2004 revealed that the closest recorded archaeological site (CA-SFR-15) is located about 0.5 miles south of the southern terminus of the water pipeline at Marin Street.

8.3.3.5.6 Native American Contacts. SECAL/Mirant contacted the Native American Heritage Commission (NAHC) to obtain a list of concerned Native Americans living in the San Francisco Area. SECAL/Mirant sent letters to the Native Americans describing the project and asked about concerns. No responses were received. CH2M HILL also contacted the NAHC in December 2003, and received a list of concerned Native Americans. Letters were also sent to the listed Native Americans. No responses have been received through January 29, 2004 (Appendix 8.3C).

[8] Dr. Paul Groth, Prepared Testimony Regarding Cultural Resources in Docket No. 00-AFC-4 (July 8, 2002); Christopher Ver Plank, Prepared Testimony Regarding Cultural Resources in Docket No. 00-AFC-4 (July 10, 2002);Charles E. Chase, Prepared Testimony Regarding Cultural Resources in Docket No. 00-AFC-4 (July 10, 2002).

[9] Ward Hill, "Historic Architecture Report for Station A, Potrero Power Plant, December 1999"; CEC, Final Staff Assessment, Cultural Resources, 5.4-10, 5.4.15-16. February 13, 2003.

8.3.4 Environmental Consequences

This subsection assesses the potential environmental impacts of the project on cultural resources. Laws governing the treatment of cultural resources require the Energy Commission to categorize resources by determining whether they meet several sets of specified criteria. These categories then in turn influence the analysis of potential impacts (environmental consequences) to the resources and the mitigation that may be required to ameliorate any such impacts.

8.3.4.1 Significance Criteria

Under federal law, only historical or prehistoric sites, objects, or features, or architectural resources that are determined by a qualified researcher to be "important" or "significant" in accordance with federal guidelines need to be assessed for potential impacts. The significance of historical and prehistoric cultural resources is judged in accordance with the criteria for eligibility for nomination to the National Register of Historic Places (NRHP) as defined in 36 CFR 60.4. If such resources are determined to be significant, and therefore eligible for listing in the NRHP, as well as the California Register, they are afforded certain consideration under the National Historic Preservation Act and/or CEQA. The federal laws are not applicable to the SFERP project at this time because there is no known federal nexus.

The NRHP criteria state that "eligible historic properties" are: districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and that: (a) are associated with events that have made a significant contribution to the broad patterns of our history; or (b) that are associated with the lives of persons significant in our past; or (c) that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or (d) that have yielded, or may be likely to yield, information important to history or prehistory. Isolated finds by definition do not meet these criteria.

Under federal law, resources determined not to be significant, that is, not eligible for NRHP listing, are subject to recording and documentation only, and are afforded no further protection. However, occasionally certain resources, although they may not be assessed as "significant," may nonetheless be of local or regional importance such that mitigation may be warranted regardless of their assessed significance. Energy Commission staff evaluates the survey reports and site records for any known resources located within or adjacent to the project area potential effects (APE) to determine whether they meet the eligibility criteria.

CEQA Guidelines now explicitly require the lead agency (the Energy Commission) to make a determination of whether a proposed project will affect "historical resources." The guidelines provide a definition for historical resources and set forth a listing of criteria for the California Register of Historical Resources (CRHR). These are essentially the same as the eligibility criteria of the NRHP. In addition, as with the NRHP, historical resources must also possess integrity of location, design, setting, materials, workmanship, feeling, and association. If the criteria are met and the resource is determined eligible for the CRHR, the Energy Commission must evaluate whether the project will cause a "substantial adverse change in the significance of the historical resource."

CEQA also contains a section addressing "unique" archaeological resources and provides a definition of such resources (Public Resources Code, Section 21083.2). This section

establishes limitations on analysis and prohibits imposition of mitigation measures for impacts to archaeological resources that are not unique. However, the CEQA Guidelines state that the limitations in this section do not apply when an archaeological resource has already met the definition of a historical resource (14 CCR 15064.5).

8.3.4.2 Potential Environmental Impacts to Historic Properties

8.3.4.2.1 Potential Environmental Impacts to Resources at the Project Site. As currently configured, the SFERP plant will require demolition of both the Compressor House and Station A. Recognizing the need to minimize adverse impacts on cultural resources, the City will rehabilitate the Meter House for use as an administration and control building. Demolition of the Compressor House, and to the extent Station A qualifies as a historic resource, Station A, would result in an impact on cultural resources that the City intends to mitigate.

Other modern structures located in the western portion of the project site may also be demolished (see Figure 8.3-1 for overview of project site and laydown area).

Assessing impacts on resources located outside the project site that may be subject to indirect impact by construction of the plant is a more complicated question. Consideration of the issue revolves around three questions:

1. Will the loss of the Compressor House and Station A have a significant indirect impact on surrounding significant resources or districts?
2. Will the construction of the project have a significant impact on the Meter House?
3. Will the construction of the project have a significant indirect impact on surrounding resources or districts?

The following discussion addresses each concept in turn.

Will the loss of the Compressor House and Station A have a significant indirect impact on surrounding significant resources or districts? Demolition of the Compressor House and Station A will not constitute a substantial adverse change in the significance of the CWD, Pier 70 District, and Dogpatch District as historical resources. The buildings are not within the Pier 70 or Dogpatch district boundaries. Moreover, they are screened from the Dogpatch District's viewshed by the large industrial buildings along the east side of 3rd Street that are at the southeast edge, but outside of, the Dogpatch District. A photosimulation of the view from the intersection of 20th and Mississippi streets towards the project site, depicts how this view from the Dogpatch area will be affected. This photosimulation appears in Subsection 8.11, Visual Resources (see Figure 8.11-6a, 6b). The boundaries of the Pier 70 District are to the north of the project site, although the buildings are visible from the Pier 70 District.

Assessing indirect impacts to the CWD differs from Pier 70/Dogpatch for several reasons. First, as described in Subsection 8.3.3.5, the District is still before the State Office of Historic Preservation for review of eligibility for listing in the CRHR.

Assuming, for the purposes of this application, that the CWD can be considered an historical resource, the loss of the Compressor House and Station A, will not materially alter the physical characteristics of the District as a whole in such a way as to disqualify it for inclusion

in the CRHR for lack of historic integrity. Although the Compressor House and Station A are among the last remaining resources related to the gas manufacturing industry in this area of San Francisco, they constitute two buildings among hundreds in the CWD that are representative of the district's wider historic context of, and relevant historical association with, the city's general industrial development. Furthermore, under the City's plan, the Meter House will be preserved and rehabilitated, with the result that one of the remaining gas manufacturing industry buildings within the district will be reused and reoccupied.

Thus, demolition of the Compressor House and Station A is not considered to be a significant indirect impact to the historic districts that include and surround the project site.

Will the construction of the project have a significant impact on the Meter House? The Meter House will suffer a direct impact owing to changes in setting occasioned by the demolition of the Compressor House and Station A and construction of the new project facilities. However, rehabilitation of the Meter House will importantly contribute to mitigation of the loss of the Compressor House and Station A.

Will the construction of the project have a significant indirect impact on surrounding resources or districts? Construction of a modern complex at the project site would not adversely impact the CWD as a whole, given that other modern buildings already exist within its boundaries and a large number of historic buildings will remain.

Two significant resources are located immediately adjacent to, and south of, the project site: the two sugar warehouses that share the address of 435 23rd Street. The two buildings were evaluated as eligible for the CRHR under Criterion 1 at a local level of significance, for their place in history of sugar refining in San Francisco and as the last remaining buildings from the Western Sugar Refinery (CEC, 2002). The period of significance for the buildings was set at the years from 1923 through 1948, when the company ceased operations in the city. The two warehouses are isolated remnants of a much larger facility, which in 1950 consisted of at least 16 buildings, including 4 multi-story buildings, large wooden warehouses, wharfs and docks, tanks, rail spurs and roadways. Except for one of the multi-story buildings and the 2 concrete sugar warehouses, all were demolished by 1950. The large multi-story building was demolished after July 1993, leaving the 2 warehouses currently extant as a remnant of the complex.[10]

The project will have no direct impact on these two warehouse buildings. There will be an indirect visual effect, owing to the change in adjacent setting caused by the demolition of Station A and the Compressor House, both of which are visible from the sugar warehouses, and their replacement with a modern complex of generating equipment and structures. However, given the fact that the sugar refinery complex of which they were originally a part has been essentially demolished (most recently the eastern one half of Station A, and the multi-story sugar warehouse once located directly to the north), and by virtue of the nature of construction in the area (these warehouses are bordered on the north by Mirant's Potrero generating facility and a modern trucking facility to the west), the indirect visual impacts

[10] Michael Corbett, Architectural Historian, URS Corporation, "Historic Architecture Report for 435 23rd Street, City and County of San Francisco, California, January 2001; URS Corporation, "Responses to CEC Data Requests (Set 6) Cooling Tower System Amendment Potrero Power Plant Unit 7, AFC," September 2003. See data requests 216-216 with responses; TerraServer, http://terraserver-usa.com/printimage.aspx?T=1&S=10&X=2771&Y= 20892&Z=10&P= San+ Francisco%2c+California%2c+United+States&D=10+ Jul+1993, accessed December 20, 2003

should be considered less than significant.[11] Photosimulations of the change from current conditions to proposed conditions, showing the sugar warehouses and the buildings on the project site, can be found in Section 8.11, Visual Resources (see Figure 8.11-6a, 6b).

8.3.4.2.2 Potential Environmental Impacts to Resources at the Laydown Site. The construction laydown site (see Figure 8.3-1) is vacant land that has been reclaimed from San Francisco Bay in past decades. All laydown operations will rest on existing graded/graveled surfaces. No subsurface ground alteration will take place; therefore, there would be no possibility that laydown operations could disturb any buried historic archaeological resources (if any are present). A CHRIS records search initiated February 2, 2004 is provided as confidential Appendix 8.3D.

8.3.4.2.3 Potential Environmental Impacts to Resources Along the Water Pipeline Corridor. As currently configured, the water supply pipeline will be constructed within a concrete collection box or along the shoulder of existing city streets (23rd Street, Tennessee Street, Cesar Chavez Street, Mississippi Street and part of Marin Street) (see Figure 8.3-1). Construction confined within the existing city streets will not affect the historic built environment.

Pipeline construction may affect historic or prehistoric archaeological resources that may be present beneath the city streets. Because the street grid pattern in this area has been stable since the end of the 19th century, construction in the existing streets is not expected to encounter historic building foundations. The potential exists, however, for construction to encounter historic debris that pre-dates the original paving of these streets (either by paving stones or by asphalt). The potential also exists for construction to encounter buried prehistoric archaeological resources, if any are present along the streets that now cover the Islais Creek locale (Marin, Mississippi and Cesar Chavez Streets). A CHRIS records search initiated February 2, 2004 as confidential Appendix 8.3D.

8.3.4.3 Potential Environmental Impacts to Subsurface Archeological Resources

Since project development and construction usually entail surface and subsurface disturbance of the ground, the proposed SFERP project has the potential to adversely affect previously unknown cultural resources. Direct impacts are those that may result from the immediate disturbance of resources, whether from vegetation removal, vehicle travel over the surface, earth-moving activities (grading), excavation (for pipelines) or demolition. Indirect impacts are those that may result from increased erosion due to site clearance and preparation, or from inadvertent damage or outright vandalism to exposed resource materials due to improved accessibility.

The potential for the project to cause impacts to cultural resources is related to the likelihood that such resources are present and whether they are actually encountered during project development and construction activities. Although known resources are absent, unknown resources could be encountered and impacts could occur. In addition, the potential for discovery does not measure the significance of individual artifacts or other cultural resources present, since it is impossible to accurately predict what specific materials could be encountered. Furthermore, sometimes the full significance of discovered cultural

[11] It should be noted that this was the conclusion reached by CEC staff in its FSA for the Mirant project. See CEC, Final Staff Assessment, Cultural Resources, 5.4-10, 5.4.15-16. February 13, 2003.

resources can only be determined after they have been collected, prepared, and studied by professional archaeologists, historians and/or architectural historians.

Available information points to high sensitivity for buried prehistoric resources in the southern portions of the proposed water supply pipeline. Fortunately, much of the southern portion of the pipeline will be contained within an existing collection box. The presence of a prehistoric shellmound (CA-SFR-15) recorded by pioneering U.C. Berkeley archaeologist Nels Nelson in 1910 about 0.5 miles south of Marin Street confirms the prehistoric occupation of Islais Creek and its former saltmarsh area.

Actual construction is expected to occur from second quarter 2005 to fourth quarter 2006. There may be a 5-month demolition period prior to the construction period. Once constructed, the project should have no operational impacts on cultural resources.

8.3.5 Cumulative Impacts

The largest group of industrial historical buildings remaining in the area is the Pier 70 Historical District, adjacent to the proposed project on the north. The City and Port of San Francisco are studying adaptive reuse of these structures as part of future development projects. Thus, these structures will likely be preserved as a result of future projects, rather than impacted. The other group of historic buildings in the area is the residential, commercial, and industrial buildings in the Dogpatch Neighborhood west of Third Street, which has been designated as a local historic district under Article 10 of the Planning Code. No specific projects proposed for this area are known, and future projects would be subject to review and approval under Article 10 of the Planning Code.

Impacts to subsurface archaeological resources from the proposed project and other projects in the vicinity could occur. However, project proponents for this and future projects in the area can mitigate impacts to as yet undiscovered subsurface archaeological sites by implementing mitigation measures requiring construction monitoring, evaluation of resources discovered during monitoring, and avoidance or data recovery for resources evaluated as significant (eligible for the CRHR or NRHP).

8.3.6 Mitigation Measures

The proposed project contemplates similar, but lesser, overall impacts to the project site and surrounding area than those envisioned in the Mirant Project. Importantly, the proposed project will preserve the Meter House and does not require demolition of the Pump House or the Gate House, both structures over 45 years old. The City will accept the mitigation measures proposed by CEC staff for Potrero 7 as revised to eliminate the need to move the Compressor House. Finally, the City remains open to discussing additional mitigation for cultural resources in the context of negotiating a community benefits package as discussed in Section 4, Environmental Justice. The City will seek community input on the level of limited funds for a community benefits package that should be devoted to cultural resources.

The City notes that in the CEC FSA for Potrero Unit 7, CEC staff recommended that, if feasible, the Meter House and Compressor House should be moved rather than demolished. However, their studies found that moving the buildings would not be possible. Thus, in hearings held on December 9, 2002, CEC staff testified that moving the two historic structures was not feasible. Staff, therefore, replaced the condition requiring that the

buildings be moved with a condition requiring production of a video "that documents the Meter House and the Compressor House and the role of those buildings in the gas manufacturing and distribution process in San Francisco."[12] In addition, City witnesses in the Potrero 7 case testified that moving the buildings would reduce their historic significance by taking them out of their original setting and thus did not constitute appropriate mitigation. Thus, the City does not propose to move the Compressor House or Station A. Instead, the City has focussed on preserving the Meter House.

Preservation and reuse of the Meter House will help mitigate the loss of the Compressor House and Station A by providing for retention of one of the remaining gas manufacturing buildings in the city. The City will aim to meet the Secretary of the Interior's *Standards for Treatment of Historic Properties*, to the extent feasible and cost-effective.

The Applicant also suggests that the same measures regarding archaeological resources be adopted for this project as Mirant proposed for the Potrero project. These were presented in the FSA for the Mirant AFC, and are quoted below:

> The potential for encountering eligible subsurface archaeological resources will be assessed by performing a test program using a bucket auger both in the power plant property and along the underground transmission line route. The Applicant has prepared a research design and testing plan to guide evaluation of any resources encountered during subsurface testing or construction. The plan provides research questions relevant to the kinds of buried archaeological resources that could be encountered and provides guidelines for making decisions about CRHR eligibility. This plan will expedite the evaluation process, especially for resources encountered during construction.
>
> Staff also recommends construction monitoring for both the power plant and underground transmission cable. Adoption of staff's proposed conditions of certification will reduce the potential for adverse project impacts on subsurface cultural resources to a less than significant level, but may not reduce the impacts on above ground eligible historical resources to a less than a significant level.

The proposed project contemplates similar, but lesser, overall impacts to the project site and surrounding area than those envisioned in the Mirant Project. The footprint of the proposed SFERP is smaller than that proposed for Mirant's Potrero project and the linear for the SFERP (water supply pipeline) is shorter than Mirant's underground transmission route.

Construction monitoring by a qualified archaeologist is recommended for any subsurface construction at the plant site and along the water supply pipeline corridor. Monitoring of the laydown site is not recommended because there will be no subsurface disturbance of the laydown site. If archaeological material is observed by the monitoring archaeologist, ground disturbing activity should be halted in the vicinity of the find so that its significance (CRHR

[12] See testimony of Gary Reinhohl, CEC Cultural Resources Planner, in "Evidentiary Hearing Before the California Energy Resources Conservation and Development Commission, In the Matter of: Application for Certification, Mirant Corporation's Potrero Power Plant Unit 7 Project, Docket No. 00-AFC-4." December 9, 2002. Pages 39-43 cover the feasibility of moving the two buildings and the new condition of certification.

eligibility) can be determined. If evaluated as significant, mitigation measures (avoidance or data recovery) should be developed in consultation with the CEC. A worker education program is recommended to ensure that buried archaeological resources are recognized by construction crews. Such a program should include information about the kinds of archaeological material that could be encountered and the procedures to be followed if such material is discovered. It is recommended here that previous conditions of certification for archaeological resources presented by Reinoehl and Mason (2002) for the Mirant project would be applicable for the SFERP project with appropriate modifications to suit the SFERP project.

8.3.7 Involved Agencies and Agency Contacts

Table 8.3-2 provides a list of agencies and contact persons of potentially responsible agencies.

TABLE 8.3-2
Agencies and Agency Contacts for SFERP Cultural Resources

Agency	Contact/Title	Phone Number	Address
NAHC	Larry Myers, Executive Secretary	916-653-4082	915 Capitol Mall, Sacramento

8.3.8 Permits and Permitting Schedule

Permits dealing with the effects on cultural resources are addressed as part of the building permit process.

8.3.9 References

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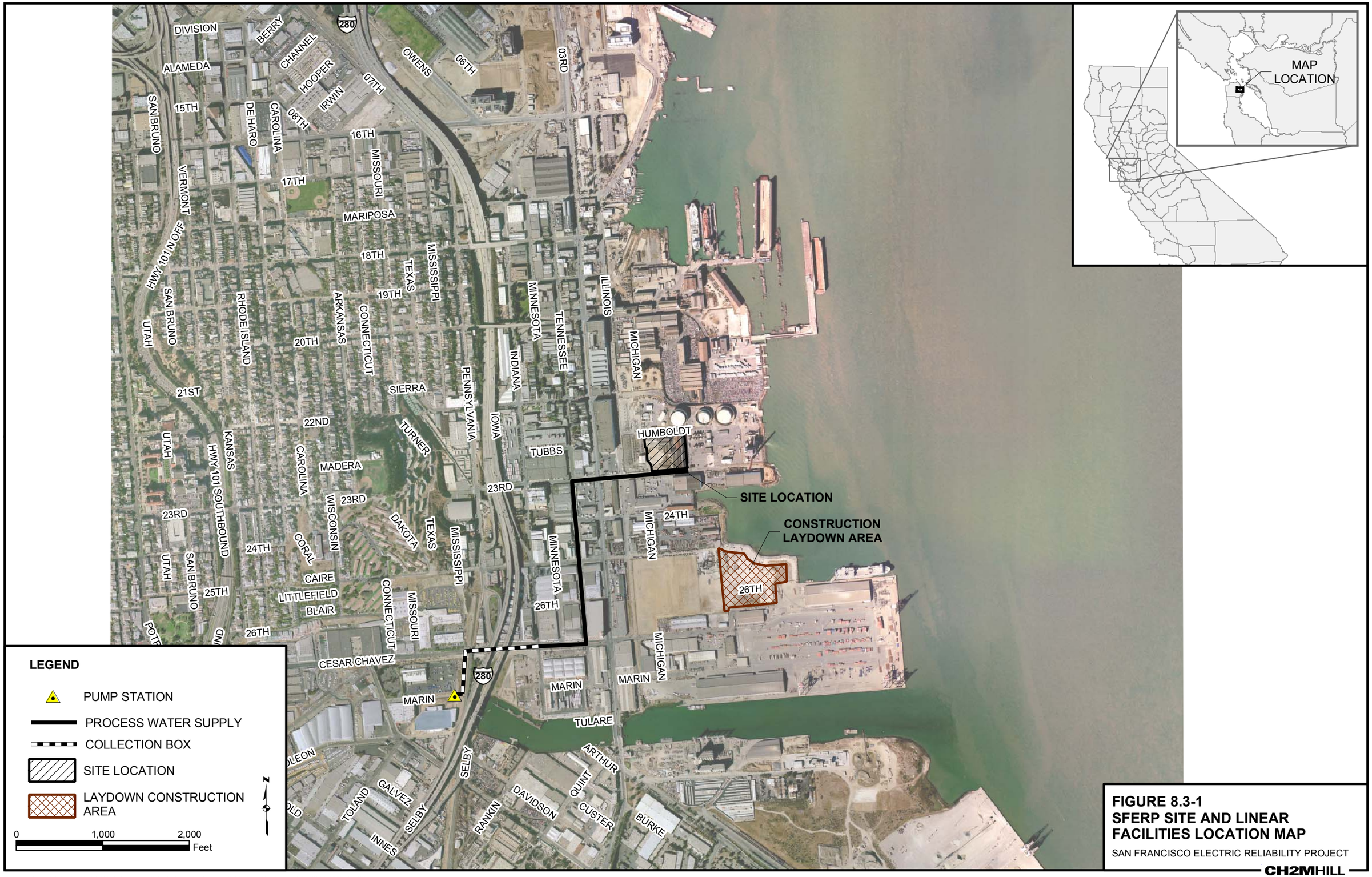

FIGURE 8.3-1
SFERP SITE AND LINEAR FACILITIES LOCATION MAP

SAN FRANCISCO ELECTRIC RELIABILITY PROJECT

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